SPECIFICATION:

Paragraph at page 5, lines 8 to 15:

It is assumed that the number of bits of the memory access unit is M1 bits, and the number of coded data bits of the compressing processing units, which are allocated based on a compression ratio, are N1, N2, N3, ... Nn, respectively, and M1 < N1 + N2 + ... Nn. In this case, coded data of n blocks cannot be extracted through one access. Accordingly, by decreasing the number of bits allocated by N1 + N2 + ... Nn by N1 + N2 + ... Nn - M1, an allocated [a llocated] number of bits can be made equal to or less than M1, an allocated bit can be made equal to or less than M1, and therefore, the coded data can be taken out through one access.

CLAIMS:

1. (Amended)   A moving picture decoding apparatus to which a compressed stream generated using [an] inter-frame prediction [system] is input, said apparatus comprising:

a [compression means for compressing] compressor that compresses a decoded image and [storing] stores the resulting compressed image in [storage means] a memory;

an expander that expands [expansion means for expanding] a compressed image stored in said [storage means] memory;

a quantization [control means for controlling] controller that controls how quantization [on compression] is performed in said [compression means] compressor; and

a memory access width [control means for controlling] controller that controls said quantization [control means so] controller such that bit allocation [control] is

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[conducted so as to be in conformity with] controlled in relation to the number of bits of [an] a memory access unit of said [storage means] memory.

2. (Amended) The [A] moving picture decoding apparatus according to claim 1, wherein said memory access width controller [access width control means comprises means for controlling] controls said quantization controller [control means so] such that [the] a number of coded bits of [one or a plurality of compression processing blocks of] the image processed in said compression means [or] for every control unit of compression processing is in conformity with the number of bits of [an] the memory access unit of said [storage means] memory in the case that the coded number of bits exceeds the number of bits of the memory access unit of said memory [an access unit of said storage means or is lacking].

3. (Amended) The [A] moving picture decoding apparatus according to claim 1, wherein [said compression means] the compressor and [expansion means] the expander conduct compression and expansion, respectively, in accordance with a pixel difference prediction encoding system.

4. (Amended) The [A] moving picture decoding apparatus according to claim 1, wherein said quantization [control means] controller controls quantization by preparing a plurality of quantizers and a plurality of quantization characteristic tables.

5. (Amended) The [A] moving picture decoding apparatus according to claim 1, wherein said quantization [control means] controller controls quantization by preparing a plurality of quantizers and a quantization characteristic table being shared by said plurality of quantizers.

6. (Amended) The [A] moving picture decoding apparatus according to claim 1, wherein [said compression means] the compressor and [expansion means] the expander

conduct compression and expansion, respectively, in accordance with an orthogonal translation encoding system.

7. (Amended) The [A] moving picture decoding apparatus according to claim 1, wherein said memory access width [control means] controller conducts control using information included in the compressed stream.

8. (Amended) The [A] moving picture decoding apparatus according to claim 1, wherein [said storage means] the memory is a frame memory.

9. (Amended) A moving picture decoding apparatus to which a compressed stream generated using [an] inter-frame prediction [system] is input, said apparatus comprising:

a compressor that compresses [compression means for compressing] a decoded image;

a memory that stores the [storage means for storing a] compressed image output from said compression means;

an expander that expands [expansion means for expanding] the compressed image stored in said [storage means] memory;

a quantization [control means for controlling] controller that controls how quantization [on compression] is performed in said compressor [compression means]; and

a memory access width [control means for applying] controller that applies bit allocation control to said quantization controller based on [control means so as to be in conformity with] the number of bits of [an access unit of said storage means] a memory access unit of said memory,

wherein said quantization [control means] controller controls quantization performed by the compressor [in said compression means] based on access width information from said memory access width controller such [control means so] that a number of bits [generated information content for one or a plurality of compression processing blocks] of the image processed in said compressor [compression means or] for every control unit of compression processing is equal to or less than the number of bits of [an] the memory access unit of said [storage means] memory in the case that the

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[generated information content] the number of bits for every control unit of compression processing exceeds the number of bits of [an] memory access unit of said memory [storage means or is lacking].

10. (Amended) The [A] moving picture decoding apparatus according to claim 9, wherein said memory access width [control means] controller applies bit allocation control to said quantization [control means] controller [so as to be] in conformity with the number of bits of [an] the memory access unit of said [storage means] memory, based on an occupied content of said [storage means] memory.

11. (Amended) The [A] moving picture decoding apparatus according to claim 9, wherein [said access width control means] the memory access width controller conducts control using information included in the compressed stream.

12. (Amended) The [A] moving picture decoding apparatus according to claim 9, wherein [said access width control means] the memory access width controller applies control to [said] the quantization [control means] controller [so that, compared with the number of bits of an access unit of said storage means, in the case that the] such that when an allocated number of bits of coded data of a compression processing block exceeds the number of bits of the memory access unit of said [storage means] memory or is less than the number of bits of the memory access unit of said [storage means] memory, the allocated number of bits is [conformed to be] made equal to or less than the number of bits of the memory access unit of said [storage means] memory by subtracting a predetermined number of bits from the allocated bits of coded data of said compression processing block or by increasing the number of allocated bits by the predetermined number of bits, whereby the coded data is enabled to be extracted from said storage means with one access occurrence.

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13. (Amended) The [A] moving picture decoding apparatus according to claim 9, wherein [said compression means] the compressor controls quantization characteristics used for quantizing said decoded image, based on control by said quantization [control means] controller.

14. (Amended) The [A] moving picture decoding apparatus according to claim 9, wherein said quantization [control means] controller controls quantization by preparing a plurality of quantizers having quantization characteristics different from each other, and wherein a quantization characteristic table is shared by said plurality of quantizers.

15. (Amended) The [A] moving picture decoding apparatus according to claim 9, wherein

said [compression means] compressor comprises a subtracter, a quantizer, an encoder, an inverse quantizer, an adder and a predictor,

a prediction error obtained in said subtracter by a subtraction operation between said decoded image and a predicted value from said predictor is supplied to said quantizer,

under control of said quantization [control means] controller, said quantizer quantizes said prediction error and supplies the quantized result to said encoder and said inverse quantizer,

said encoder encodes an output from said quantizer and outputs the encoded result to said storage means, and

inverse quantization and local decoding are conducted in said inverse quantization, said adder, and said predictor.

16. (Amended) The [A] moving picture decoding apparatus according to claim 9, wherein [said storage means] the memory is a frame memory.

17. (Amended) A moving picture decoding method comprising the steps of:

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detecting a number of coded bits for [one or a plurality of compression processing blocks of data or for] every control unit of compression processing and controlling said number of coded bits so that said number of coded bits is in conformity with the number of bits of [an] a memory access unit of a [storage means] memory when said detected number of coded bits exceeds the number of bits of [an] a memory access unit of said memory [storage means or is lacking].

18. (Amended) The [A] moving picture [of] decoding method according to claim 17, wherein said step of controlling comprises using information from an external compressed data stream.